LISTING OF CLAIMS

1. (Currently Amended) A plano-convex optical sheet having a positive power including:

a substantially planar inner surface;

opposed lateral edges, and

a thickness s that is decreasing proceeding from a transversal central line passing through the geometric center of the optical sheet towards said opposed lateral edges along a portion of predetermined width w of the optical sheet, so as to define a convex outer surface having a curvature such that the optical sheet is capable of providing once bent a cylindrically shaped optically correct visor;

wherein the thickness s of the sheet decreases from said transversal central line towards said opposed lateral edges in accordance with the following equation:

$$s^2 = (x_2 - x_1)^2 + (y_2 - y_1)^2$$

$$d = (\pi - \alpha) R1$$

wherein:

s is the thickness of the optical sheet at a point having a distance d from the transversal central line as measured along the inner surface of the optical sheet;

d is the distance from the transversal central line as measured along the inner surface of the optical sheet at a point of thickness s;

x_1, y_1 are the Cartesian coordinates, in a Cartesian plane having its origin at the center of curvature C2 of an outer surface of the visor to be obtained, of a point having a distance d as measured along the inner surface of the visor to be obtained from the transversal central line;

x_2, y_2 are the Cartesian coordinates, in said Cartesian plane, of a point lying on the outer surface of the final visor to be obtained and on the same straight line l passing through the center of curvature C1 and a point of coordinates x_1, y_1;

R1 is the radius of curvature of the inner surface of the visor as defined by the following equation:

$$1/R1 = \frac{1/R2}{1 - [s_{max} \cdot 1/R2 \cdot (n-1)/n]}$$

wherein

R2 is the radius of curvature of the outer surface of the visor;

s_{max} is the maximum thickness of the optical sheet at the transversal central line;

n is the refraction index of the optical sheet;

α is the angle defined by the straight line l passing through the center of curvature C1 and points x_1, y_1 and x_2, y_2 in the said Cartesian plane of coordinates.

2. (Original) A plano-convex optical sheet according to claim 1, wherein the thickness s of the optical sheet decreases from said transversal central line towards said opposed lateral edges along substantially the total width wt of the optical sheet.

3. (Original) A plano-convex optical sheet according to claim 1, wherein the thickness s of the optical sheet decreases from said transversal central line towards said opposed lateral edges along a portion of the optical sheet having a width w adapted to include, once bent, substantially the entire field of lateral vision allowed by the visor.

4. (Original) A plano-convex optical sheet according to claim 1, wherein the thickness s of the optical sheet decreases from said transversal central line towards said

opposed lateral edges along a portion of the optical sheet having a width w comprised between about 84 and about 500 mm.

5. (Canceled)

6. (Original) A plano-convex optical sheet according to claim 1, having a maximum thickness s_{max} along said transversal central line comprised between about 1 and about 5 mm.

7. (Original) A plano-convex optical sheet according to claim 1, having a minimum thickness s_{min} at said opposed lateral edges comprised between about 1 and about 3 mm.

8. (Currently Amended) A method of manufacturing a cylindrically shaped optically correct visor comprising the steps of :

a) providing a plano-convex optical sheet having a positive power;

b) bending said sheet to an appropriate curvature so as to annul the positive power of said sheet;

wherein the thickness s of the sheet decreases from said transversal central line towards said opposed lateral edges in accordance with the following equation:

$$s^2 = (x_2 - x_1)^2 + (y_2 - y_1)^2$$

$$d = (\pi - \alpha) R1$$

wherein:

s is the thickness of the optical sheet at a point having a distance d from the transversal central line as measured along the inner surface of the optical sheet;

d is the distance from the transversal central line as measured along the inner surface of the optical sheet at a point of thickness s;

x_1, y_1 are the Cartesian coordinates, in a Cartesian plane having its origin at the center of curvature C2 of an outer surface of the visor to be obtained, of a point having a distance d as measured along the inner surface of the visor to be obtained from the transversal central line;

x_2, y_2 are the Cartesian coordinates, in said Cartesian plane, of a point lying on the outer surface of the final visor to be obtained and on the same straight line l passing through the center of curvature C1 and a point of coordinates x_1, y_1;

R1 is the radius of curvature of the inner surface of the visor as defined by the following equation:

$$1/R1 = \frac{1/R2}{1 - [s_{max} \cdot 1/R2 \cdot (n-1)/n]}$$

wherein

R2 is the radius of curvature of the outer surface of the visor;

s_{max} is the maximum thickness of the optical sheet at the transversal central line;

n is the refraction index of the optical sheet;

α is the angle defined by the straight line l passing through the center of curvature C1 and points x_1, y_1 and x_2, y_2 in the said Cartesian plane of coordinates.

9. (Original) A method according to claim 8, wherein said step b) is carried out by heating said sheet at a temperature above the softening temperature thereof and by bending the heated sheet in a molding apparatus having a predetermined curvature.

10. (Original) A method according to claim 8, wherein said predetermined curvature is such that the curvature radius R2 of the outer surface of the visor is comprised between base 2 and base 12.

11. (Original) A method according to claim 8, further comprising the step of cutting the bent optical sheet obtained from step b) along two cutting lines substantially parallel to said transversal central line and positioned at different distances therefrom, so as to obtain a visor having a different thickness s at opposed lateral edges thereof.